A. L. RADLEIN.

SPACING SLEEVE.

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1,318,591. Patented Oct. 14, 1919.

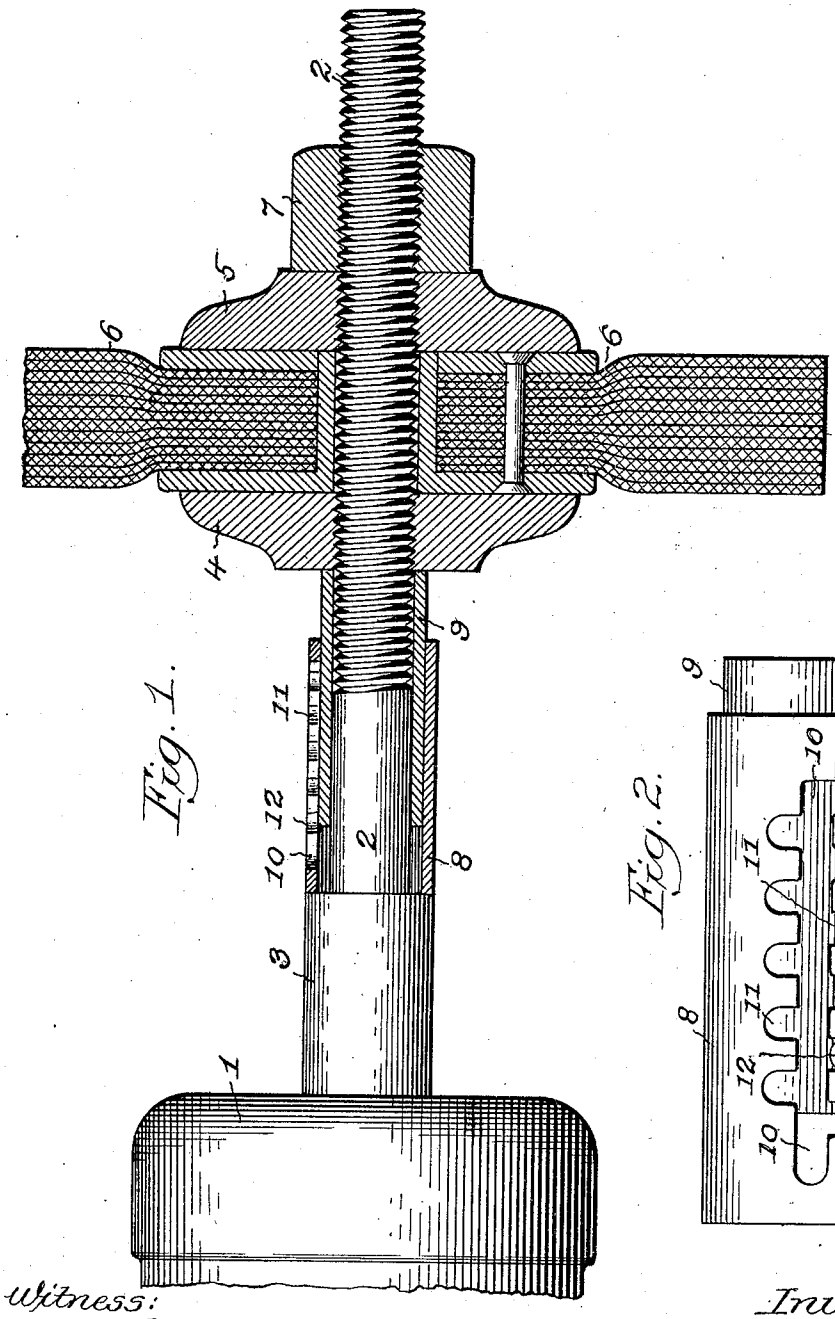


Fig. 1.

Fig. 2.

Witness:
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UNITED STATES PATENT OFFICE.

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SPACING-SLEEVE.

1,318,591. Specification of Letters Patent. Patented Oct. 14, 1919.

Application filed August 23, 1918. Serial No. 251,052.

To all whom it may concern:

Be it known that I, ALBERT L. RADLEIN, a citizen of the United States of America, and a resident of Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Spacing-Sleeves, of which the following is a specification.

This invention relates to means for positioning polishing wheels and the like on their carrying spindles in an adjustable manner in order to attain any required location of the wheel beyond the headstock of the machine, and the object of the present improvement is:—

To provide a simple and efficient structural formation and combination of parts in a telescopic spacing sleeve for insertion between the usual fixed collar of the carrying spindle and the polishing or other wheel, said sleeve being adapted to be extended or contracted to a required length and be locked at such point of adjustment so that when in its interposed condition, the required amount of overhang of the polishing or like wheel at the side of the headstock of the machine will be attained in an effective and substantial manner, all as will hereinafter more fully appear.

In the accompanying drawing:—

Figure 1 is a longitudinal sectional elevation, illustrating the general arrangement of parts in the present improvement.

Fig. 2 is a detail side elevation of the spacing sleeve. Like reference numerals indicate like parts in both views.

Referring to the drawing, 1 designates a portion of the headstock in which is mounted the live spindle of a polishing or like machine. Said spindle is formed with the usual screw threaded outer portion and has the usual fixed abutment collar or enlargement 3 inside of said screw threaded outer portion as shown.

4, 5 designate the usual collars loosely fitting the spindle 2, and between which the hub portion of a polishing or like wheel 6 is inserted and held in place by the clamping nut 7 having screw threaded engagement with the aforesaid screw threaded outer portion of the live spindle 2 as shown. The construction so far described is usual to polishing and like machines and the present improvement involves in connection herewith, an adjustable spacing sleeve adapted to position the polishing or like wheel 6 at different distances away from the headstock 1 of the machine and so as to attain efficient operation on different classes of work, and to such end involves a detail formation and arrangement of parts as follows:—

8 and 9 designate sleeve sections formed to telescope one within the other, with the inner sleeve section 9 having a sliding fit upon the live spindle 2 of the machine. Said sleeves are provided with any usual interengaging means whereby they are locked together at the adjustment or extension of one sleeve section in relation to the other, said means preferably comprising parts as follows:

10 designates a longitudinal slot formed in the outer sleeve 8 and having two series of lateral notches 11 arranged in alternated or staggered relation as shown.

12 designates a pin or stud fixed on the inner sleeve 9 and having a longitudinal sliding movement in the slot 10 aforesaid, in the operation of adjusting or telescoping the sleeve section 8, 9, and adapted to be moved laterally into a next adjacent lateral notch 11 to lock said sleeve section at the required adjustment.

Having thus fully described my said invention, what I claim as new and desire to secure by Letters Patent, is:—

1. The combination with the screw threaded live spindle and fastening nut of a polishing machine or the like, of a spacing sleeve adapted to fit between the fixed collar of the live spindle and the usual wheel holding collar, said spacing sleeve comprising two sections formed to telescope together, and means for securing said sections at different relative adjustments substantially as set forth.

2. The combination with the screw threaded live spindle and fastening nut of a polishing machine or the like, of a spacing sleeve adapted to fit between the fixed collar of the live spindle and the usual wheel holding collars, said spacing sleeve comprising two sections formed to telescope together, and means for securing said sections at different relative adjustments, the adjusting sleeve comprising a longitudinal slot formed in the outer section, a series of lateral notches opening into said slot, and a fixed stud on the inner sleeve section, substantially as set forth.

3. The combination with the screw threaded live spindle and fastening nut of a pol-

ishing machine or the like, of a spacing sleeve adapted to fit between the fixed collar of the live spindle and the usual wheel holding collars, said spacing sleeve comprising two sections formed to telescope together, and means for securing said sections at different relative adjustments, the adjusting sleeve comprising a longitudinal slot formed in the outer section, lateral notches arranged in staggered relation and opening into said slot, and a fixed stud on the inner sleeve section, substantially as set forth.

Signed at Chicago, Illinois, this 15th day of August, 1918.

ALBERT L. RADLEIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."